Please provide the following information, and submit to the NOAA DM Plan Repository.

Reference to Master DM Plan (if applicable)

As stated in Section IV, Requirement 1.3, DM Plans may be hierarchical. If this DM Plan inherits provisions from a higher-level DM Plan already submitted to the Repository, then this more-specific Plan only needs to provide information that differs from what was provided in the Master DM Plan.

URL of higher-level DM Plan (if any) as submitted to DM Plan Repository:

1. General Description of Data to be Managed

1.1. Name of the Data, data collection Project, or data-producing Program:

2019 Lidar: City of Eureka, CA

1.2. Summary description of the data:

This LiDAR dataset was created for the City of Eureka, California covering approximately 105 square miles of the city and its environs. The origin data was collected on September 24th, 2019 using a Leica Hyperion LiDAR mapping unit and associated ground control was collected by a California Certified PLS. All data was acquired and processed in California Zone 1 State Plane, NAD83(2011), NAVD88 in US Survey Feet. Datasets included 12 ppsm Bare Earth Classified LAS, 1-Foot DEM and a 1-Foot Interval Contour Extraction.

The lidar point, DEM, and imagery data was provided to the Office for Coastal Management (OCM) by the City of Eureka, CA for inclusion in the Data Access Viewer (DAV). OCM processed the lidar point, DEM, and imagery data to the DAV.

In addition to this lidar point data, the imagery and the DEM data that were created from the lidar point data, are also available. These data are available for custom download at the links provided in the URL section of this metadata record.

1.3. Is this a one-time data collection, or an ongoing series of measurements? One-time data collection

1.4. Actual or planned temporal coverage of the data:

2019-09-24

1.5. Actual or planned geographic coverage of the data:

W: -124.283861, E: -124.029581, N: 40.959683, S: 40.676364

1.6. Type(s) of data:

(e.g., digital numeric data, imagery, photographs, video, audio, database, tabular data, etc.) Model (digital)

1.7. Data collection method(s):

(e.g., satellite, airplane, unmanned aerial system, radar, weather station, moored buoy,

research vessel, autonomous underwater vehicle, animal tagging, manual surveys, enforcement activities, numerical model, etc.)

1.8. If data are from a NOAA Observing System of Record, indicate name of system:

1.8.1. If data are from another observing system, please specify:

2. Point of Contact for this Data Management Plan (author or maintainer)

2.1. Name:

NOAA Office for Coastal Management (NOAA/OCM)

2.2. Title:

Metadata Contact

2.3. Affiliation or facility:

NOAA Office for Coastal Management (NOAA/OCM)

2.4. E-mail address:

coastal.info@noaa.gov

2.5. Phone number:

(843) 740-1202

3. Responsible Party for Data Management

Program Managers, or their designee, shall be responsible for assuring the proper management of the data produced by their Program. Please indicate the responsible party below.

3.1. Name:

3.2. Title:

Data Steward

4. Resources

Programs must identify resources within their own budget for managing the data they produce.

- 4.1. Have resources for management of these data been identified?
- 4.2. Approximate percentage of the budget for these data devoted to data management (specify percentage or "unknown"):

5. Data Lineage and Quality

NOAA has issued Information Quality Guidelines for ensuring and maximizing the quality, objectivity, utility, and integrity of information which it disseminates.

5.1. Processing workflow of the data from collection or acquisition to making it publicly accessible

(describe or provide URL of description):

Lineage Statement:

Data collected by Access Geographic, Inc., for the City of Eureka, CA.

Process Steps:

- LiDAR Acquisition Specifications & Tolerance: - Leica Hypersion 2 Sensor - 1500m AGL - 130 Knots - 2M Pulse Rate - Gateless Laser Mode - 150 Scan Rate - Circular Scan Pattern - 20 Degree Scan Angle - 30 Percent Sidelap - 17ppsm (Planned) - 9 SNR (Minimum) LiDAR Extraction & Deliverables: - Bare Earth Classified LAS: 1) Processed, but Unclassified 2) Bare Earth 7) Low Noise 9) Water 10) Ignored Ground 17) Bridge Decks 18) High Noise - DEM (1-Meter Posting) - 1-Foot Contour Extraction - 2020-03-19 00:00:00 - The NOAA Office for Coastal Management (OCM) received 558 files in las format from the City of Eureka, CA. The lidar data had elevation and intensity measurements. The data were in CA State Plane, Zone 0401, NAD83 (2011), US survey foot coordinates and NAVD88 (assumed GEOID12B) elevations in feet. The data were classified as: 1 - Unclassified, 2 - Ground, 7 - Noise, 9 - Water, 17 -Bridge Decks, 18 - High Noise. There were also a minimal number of points in many other random classes. OCM processed the 1, 2, 7, 9, 17, and 18 classifications of points to the Digital Coast Data Access Viewer (DAV). OCM performed the following processing on the data for Digital Coast storage and provisioning purposes: 1. The data were converted to laz format using laszip 2. The data were converted from gps week time to adjusted gps time using LAStools las2las 3. An internal OCM script was run to check the number of points by classification and by flight ID and the gps and intensity ranges. 4. File U_17 was determined to be corrupt. A replacement file was provided by Access Geographic, Inc, but this file was also found to be corrupt. OCM used Global Mapper to remove the offending points from the file. 5. Internal OCM scripts were run on the laz files to convert from orthometric (NAVD88) elevations to ellipsoid elevations using the Geoid12B model, to convert from CA State Plane Zone 0401 (NAD83 2011), US survey foot coordinates to geographic coordinates, to convert from vertical units of feet to meters, to assign the geokeys, to sort the data by gps time and zip the data to database and to http.

- 5.1.1. If data at different stages of the workflow, or products derived from these data, are subject to a separate data management plan, provide reference to other plan:
- 5.2. Quality control procedures employed (describe or provide URL of description):

6. Data Documentation

The EDMC Data Documentation Procedural Directive requires that NOAA data be well documented, specifies the use of ISO 19115 and related standards for documentation of new data, and provides links to resources and tools for metadata creation and validation.

6.1. Does metadata comply with EDMC Data Documentation directive?

No

6.1.1. If metadata are non-existent or non-compliant, please explain:

Missing/invalid information:

- 1.7. Data collection method(s)
- 3.1. Responsible Party for Data Management
- 4.1. Have resources for management of these data been identified?
- 4.2. Approximate percentage of the budget for these data devoted to data management
- 5.2. Quality control procedures employed
- 7.1. Do these data comply with the Data Access directive?
- 7.1.1. If data are not available or has limitations, has a Waiver been filed?
- 7.1.2. If there are limitations to data access, describe how data are protected
- 7.4. Approximate delay between data collection and dissemination
- 8.1. Actual or planned long-term data archive location
- 8.3. Approximate delay between data collection and submission to an archive facility
- 8.4. How will the data be protected from accidental or malicious modification or deletion prior to receipt by the archive?

6.2. Name of organization or facility providing metadata hosting:

NMFS Office of Science and Technology

6.2.1. If service is needed for metadata hosting, please indicate:

6.3. URL of metadata folder or data catalog, if known:

https://www.fisheries.noaa.gov/inport/item/59069

6.4. Process for producing and maintaining metadata

(describe or provide URL of description):

Metadata produced and maintained in accordance with the NOAA Data Documentation Procedural Directive: https://nosc.noaa.gov/EDMC/DAARWG/docs/EDMC_PD-Data_Documentation_v1.pdf

7. Data Access

NAO 212-15 states that access to environmental data may only be restricted when distribution is explicitly limited by law, regulation, policy (such as those applicable to personally identifiable information or protected critical infrastructure information or proprietary trade information) or by security requirements. The EDMC Data Access Procedural Directive contains specific guidance, recommends the use of open-standard, interoperable, non-proprietary web services, provides information about resources and tools to enable data access, and includes a Waiver to be submitted

to justify any approach other than full, unrestricted public access.

7.1. Do these data comply with the Data Access directive?

7.1.1. If the data are not to be made available to the public at all, or with limitations, has a Waiver (Appendix A of Data Access directive) been filed?

7.1.2. If there are limitations to public data access, describe how data are protected from unauthorized access or disclosure:

7.2. Name of organization of facility providing data access:

NOAA Office for Coastal Management (NOAA/OCM)

7.2.1. If data hosting service is needed, please indicate:

7.2.2. URL of data access service, if known:

https://coast.noaa.gov/dataviewer/#/lidar/search/where:ID=9026 https://coast.noaa.gov/htdata/lidar3_z/geoid18/data/9026

7.3. Data access methods or services offered:

Data is available online for bulk and custom downloads.

7.4. Approximate delay between data collection and dissemination:

7.4.1. If delay is longer than latency of automated processing, indicate under what authority data access is delayed:

8. Data Preservation and Protection

The NOAA Procedure for Scientific Records Appraisal and Archive Approval describes how to identify, appraise and decide what scientific records are to be preserved in a NOAA archive.

8.1. Actual or planned long-term data archive location:

(Specify NCEI-MD, NCEI-CO, NCEI-NC, NCEI-MS, World Data Center (WDC) facility, Other, To Be Determined, Unable to Archive, or No Archiving Intended)

8.1.1. If World Data Center or Other, specify:

8.1.2. If To Be Determined, Unable to Archive or No Archiving Intended, explain:

8.2. Data storage facility prior to being sent to an archive facility (if any):

Office for Coastal Management - Charleston, SC

- 8.3. Approximate delay between data collection and submission to an archive facility:
- 8.4. How will the data be protected from accidental or malicious modification or deletion prior to receipt by the archive?

Discuss data back-up, disaster recovery/contingency planning, and off-site data storage relevant to the data collection

9. Additional Line Office or Staff Office Questions

Line and Staff Offices may extend this template by inserting additional questions in this section.